

AMENDMENTS TO THE CLAIMS

1. **(ORIGINAL)** A magnetic coupling for transferring electrical energy to or from at least one transducer and at least one measuring circuit, said coupling comprising a first coil of an inductive coupling arrangement connected to said transducer(s) and a second coil of the inductive coupling arrangement connected to said measuring circuit(s)
2. **(ORIGINAL)** A magnetic coupling as claimed in claim 1 wherein the first and second coils are enclosed in separate housings, the first housing detachably attached within the second housing.
3. **(CURRENTLY AMENDED)** A magnetic coupling as claimed in ~~claims 1 or 2~~ claim 1 wherein the coupling is at the end of a cable connector connected to at least one transducer, the connector including a first housing enclosing the end of the cable, a first coil of an induction coupling arrangement electrically connected to the end of the cable within the housing, and a second housing enclosing a second coil of the inductive coupling arrangement, the housings detachably attached to make the signal coupling.
4. **(CURRENTLY AMENDED)** A magnetic coupling as claimed in ~~claims 2 or 3~~ claim 3 wherein the first housing is hermetically sealed.
5. **(CURRENTLY AMENDED)** A magnetic coupling as claimed in ~~claims 2, 3 or 4~~ claim 4 wherein the second housing is dimensioned to allow free travel of the first housing to make the signal coupling.
6. **(ORIGINAL)** A magnetic coupling as claimed in claim 5 wherein first and second housings are held together by suitable frictional or latching means.

7. **(ORIGINAL)** A cable connector connected to at least one transducer(s) for a magnetic coupling for transferring electrical energy to or from at least one transducer and at least one measuring circuit, wherein the cable connector is connected to the transducer(s) at one end thereof, the connector including a first housing enclosing the end of the cable, a first coil of an induction coupling arrangement electrically connected to the end of the cable within the housing, the cable connector dimensioned to be detachably attached to a second housing enclosing a second coil of the inductive coupling arrangement connected to one or more measuring circuits.
8. **(NEW)** A cable connector comprising:
 - a. a male connector including:
 - (1) a magnetic core;
 - (2) a male connector coil wound about the magnetic core, and
 - (3) a male connector housing surrounding the male connector coil and core;
 - b. a female connector including:
 - (1) a female connector housing having a female connector aperture therein sized to closely receive the male connector housing, and
 - (2) a female connector coil at least partially surrounding the aperture, wherein the male connector coil is situated within and spaced from the female connector coil when the male connector housing is inserted within the female connector aperture.
9. **(NEW)** The cable connector of claim 8 wherein the male connector coil is in electrical communication with an ultrasound probe.
10. **(NEW)** The cable connector of claim 8 wherein:
 - a. the male connector is situated at a first end of a cable, and
 - b. the second end of the cable is connected to an ultrasound probe.

11. **(NEW)** The cable connector of claim 8 wherein the male connector coil is spaced from the male connector housing by solid synthetic material, the solid synthetic material filling the male connector housing about the male connector coil and the magnetic core.
12. **(NEW)** The cable connector of claim 8 wherein the male connector coil has coil ends connected to a first end of a cable, the first end of the cable being situated within the male connector housing, and wherein the interior of the male connector housing is filled with solid synthetic material to surround the coil ends and the first end of the cable.
13. **(NEW)** The cable connector of claim 8:
 - a. further comprising a cable having a first end connected to the male connector coil, the first end of the cable being situated within the male connector housing; and
 - b. wherein the first end of the cable, the male connector coil, and the magnetic core are spaced from the male connector housing by solid synthetic material, the solid synthetic material restraining the first end of the cable, the male connector coil, and the magnetic core in fixed relationship.
14. **(NEW)** The cable connector of claim 8 wherein the male connector coil is a single-layer coil.
15. **(NEW)** The cable connector of claim 14 wherein the female connector coil is a single layer coil.

16. **(NEW)** The cable connector of claim 8 wherein:
 - a. further comprising a cable having:
 - (1) a first end connected to the male connector coil, the first end of the cable being situated within the male connector housing; and
 - (2) a second end connected to an ultrasound probe,
 - b. the first end of the cable, the male connector coil, and the magnetic core are spaced from the male connector housing by solid synthetic material, the solid synthetic material restraining the first end of the cable, the male connector coil, and the magnetic core in fixed relationship.
17. **(NEW)** The cable connector of claim 16 wherein the male connector coil is a single-layer coil.
18. **(NEW)** The cable connector of claim 17 wherein the female connector coil is a single layer coil.